



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,418	12/31/2003	Zbigniew Tokarsi	3216.51US01	9574
24113	7590	02/09/2006	EXAMINER	
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.			RODEE, CHRISTOPHER D	
4800 IDS CENTER			ART UNIT	
80 SOUTH 8TH STREET			PAPER NUMBER	
MINNEAPOLIS, MN 55402-2100			1756	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,418

Applicant(s)

TOKARSI ET AL.

Examiner

Christopher RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for charge transport compounds and the devices, articles, and processes containing these compounds where the structure of R₃, R₄, R₅, R₆, R₇, R₈, and R₉ is a defined group, does not reasonably provide enablement for these groups defined as a part of a ring group. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The instant claims permit each of R₃, R₄, R₅, R₆, R₇, R₈, and R₉ to be defined as a part of a ring. There is no disclosure in the specification as filed of how to make a part of a ring. The artisan would have to resort to undue experimentation to produce compounds having the "part of a ring" as claimed.

This rejection was presented in the last Office action. Applicants traverse this rejection by first defining the meaning of the terminology "part of ring" and then stating that based on the synthetic procedures disclosed in the specification on pages 24-29 one of skill in the art would know how to join R₄ and R₅ so that they form a ring. Based on the understanding of the term and the guidance provided in the specification applicants conclude that the claims as presented are enabled.

The Examiner has carefully considered applicants' remarks in light of the specification but cannot agree with applicants' position. First, there is no indication from the specification disclosure that "part of a ring" means that two of the R groups form together to make a ring structure as asserted in the response. The specification never defines "part of a ring" in this manner and there is no evidence in the specification to support applicants' position. For

Art Unit: 1756

example, the specification passage relied upon by applicants discloses the formation of the charge transport compounds by formation of the hydrazone groups, epoxidizing these groups, and then reaction of epoxy groups with one of the compounds discussed on page 26 to form the charge transport material. These reactions do not give a cyclic structure involving any of R₃, R₄ or R₅ in the hydrazone "arm", as referenced in the specification, or cyclic structures in R₆, R₇, R₈, and/or R₉. None of the specifically formed compounds in the specification have cyclic structures involving the groups R₃, R₄, R₅, R₆, R₇, R₈, and/or R₉. Applicants remarks also do not address how to form a part of a ring on R₃, or R₆, R₇, R₈, and R₉ where there are no other apparent nearby R groups to join to. Thus, there is no teaching in the specification of how to form a part of a ring for R₃, R₄, R₅, R₆, R₇, R₈, and R₉ and no teaching of how to make the ring asserted in the response.

The rejection is proper and is maintained.

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims remain indefinite in the definition of R₃, R₄, R₅, R₆, R₇, R₈, and R₉ as "a part of a cyclic ring". As noted in the last Office action, if the group is a part of a cyclic ring it is not a ring itself. Such an incomplete structure does not particularly point out and distinctly claim the invention because it is unclear how such a partial structure defines, with the other components, a charge transport compound.

Applicants take the position that the claims are definite because one of skill in the art would understand that part of a cyclic ring refers to an atom or group that is bonded to other atoms or groups in a ring system. As an example, carbon atom in a benzyl group is part of a

Art Unit: 1756

cyclic ring. Further, applicants state that the R groups can form together to form a ring structure.

The Examiner must maintain the rejection as presented because the claims do not define any ring as being present. Each of the groups R₃, R₄, R₅, R₆, R₇, R₈, and/or R₉ attaches to a non-cyclic carbon atom or nitrogen atom. There is no ring present that R₃, R₄, R₅, R₆, R₇, R₈, and/or R₉ can attach to or be part of. Further, there is no indication in the specification as filed that the terminology was meant to state that the R groups form together. The claims permit a single R group to be a part of a ring, in which case there is no other R group available. Further, there is no indication that any R group can form a ring with any other R group, such as when R₃ and R₆ in X₂ are a part of a ring. The claims remain indefinite. The Examiner has carefully reviewed the specification to see if there is any guidance that would aid in rendering the claim definite. Regrettably, the Examiner can find no further discussion of the meaning of this indefinite phrase or examples that show where R₃, R₄, R₅, R₆, R₇, R₈, and/or R₉ are part of a ring.

Oath/Declaration

In the last Office action the oath/declaration was objected to because the signature one of the signers was distorted. Because of the distorted signature it was unclear who actually executed the declaration. In response, applicants are understood to take the position that there is no requirement for a clear signature and that the signature is that of the inventor.

In response the Examiner refers applicants to the following. In MPEP 502.02, subpart V:

"Pursuant to 37 CFR 1.4(h), the Office may additionally inquire in regard to a signature so as to identify the signer and clarify the record where the identity of the signer is unclear."

"In lieu of ratification, the Office may require a resubmission of a properly signed duplicate document. Resubmission of a document may be required, for example, where ratification alone is inappropriate, such as where the image of the signature is of such poor

Art Unit: 1756

quality (e.g., illegible font) that the Office is unable to store or reproduce the document with the signature image."

The Examiner also refers to MPEP 605.04(a):

"Although the statute and the rules have been in existence for many years, the Office continues to receive a number of applications which have been improperly executed and/or filed. Since the improper execution and/or filing of patent applications can ultimately result in a loss of rights, it is appropriate to emphasize the importance of proper execution and filing."

Because the signature for Jonas Sidaravicius is unclear and distorted it is unclear of the signature is that of the inventor. A supplemental oath/declaration is required in response to this Office for this inventor.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

Art Unit: 1756

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
6 February 2006


CHRISTOPHER RODEE
PRIMARY EXAMINER